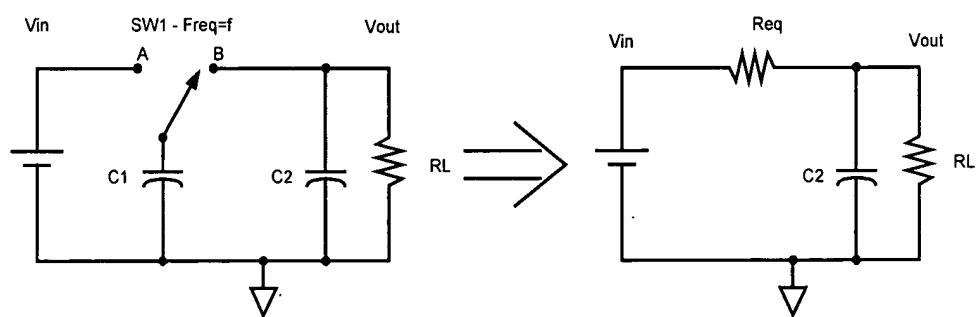


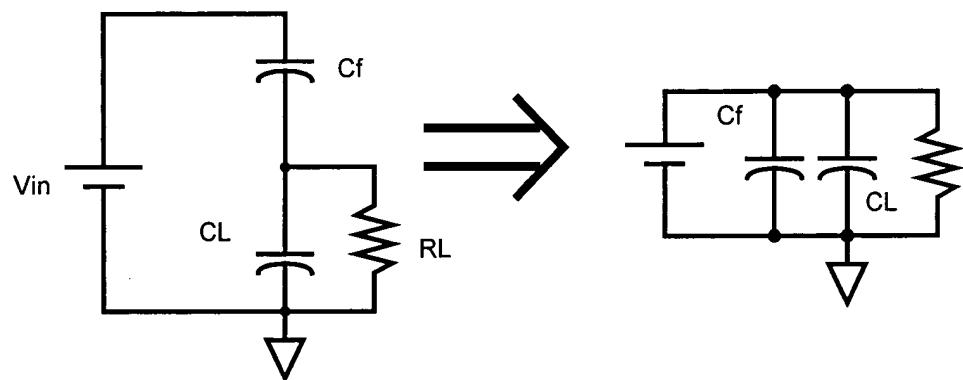
Docket #: IR-2310 (2-3711)
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AUXILIARY SUPPLIES
Inventor: Edgar ABDOULIN
Contact: James A. Finder (212) 382-0700
Drawings: 25 Sheets (Figs. 1-20)

Figure 1 – Prior Art



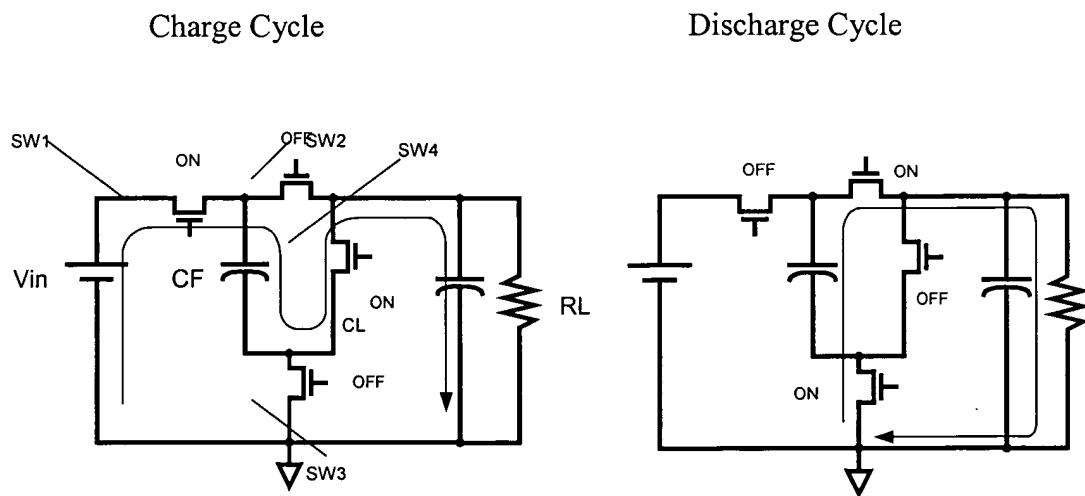
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Figure 2 – Prior Art



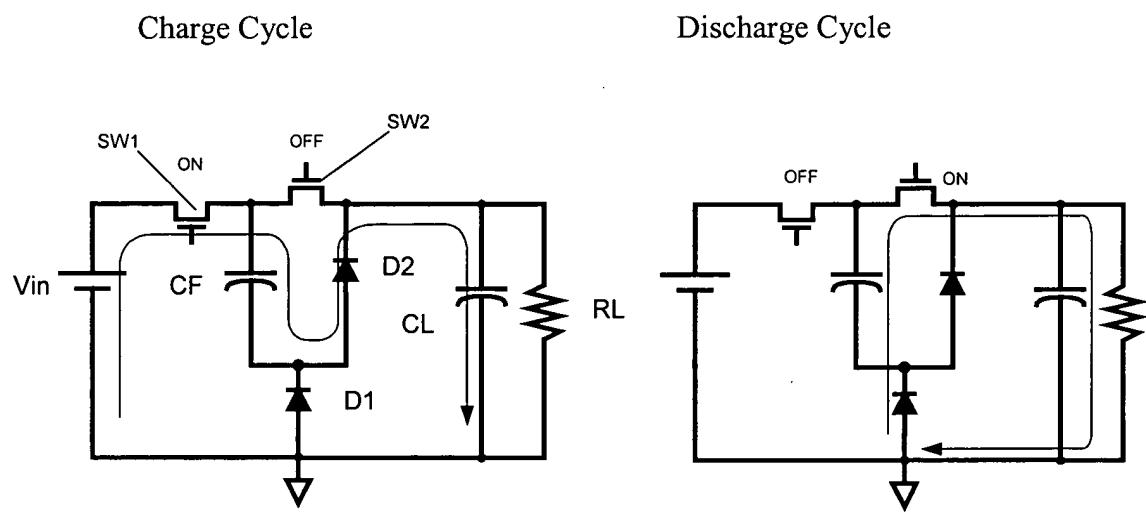
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Figure 3 - Prior Art



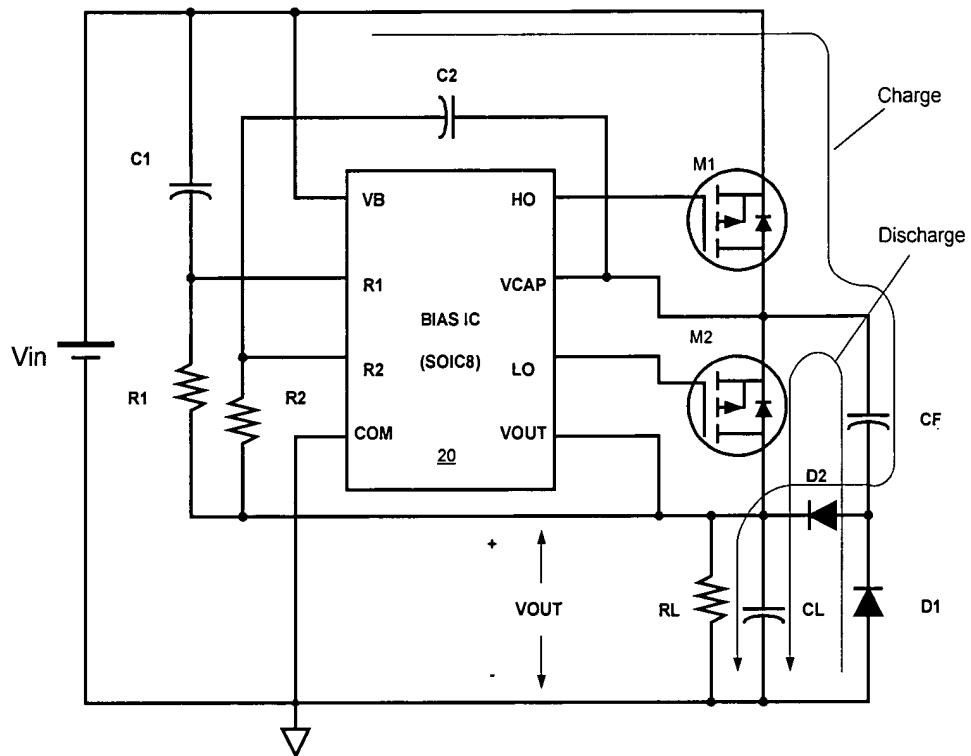
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Figure 4



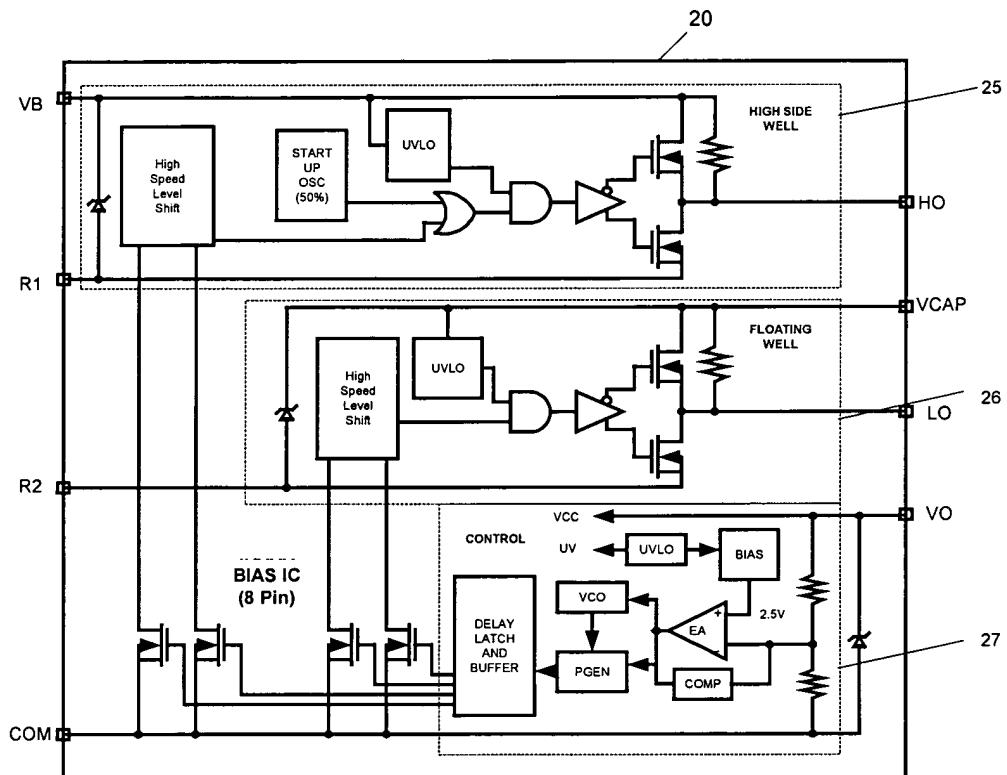
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Figure 5a



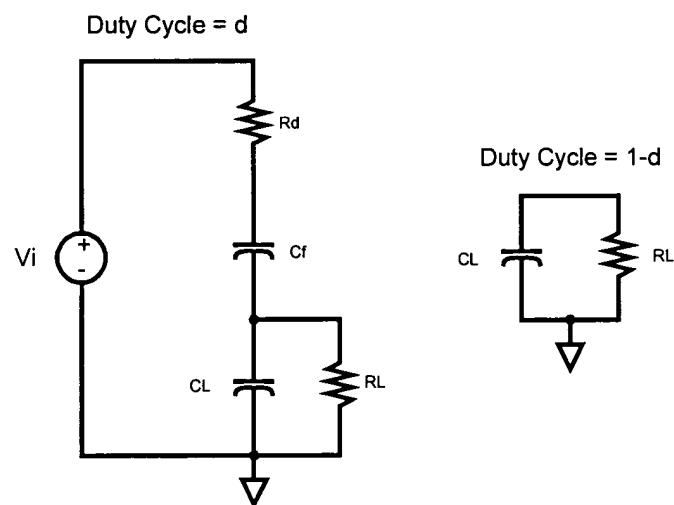
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Figure 5b



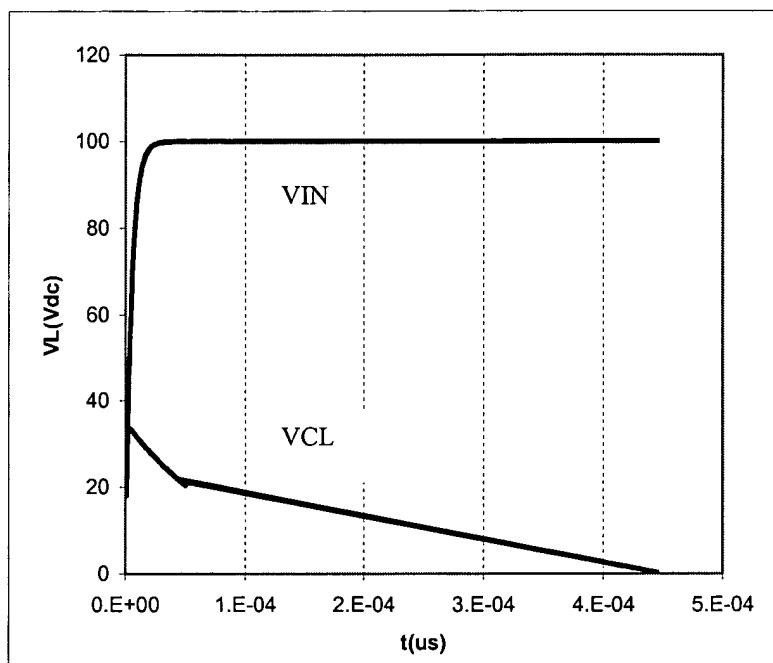
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Figure 6



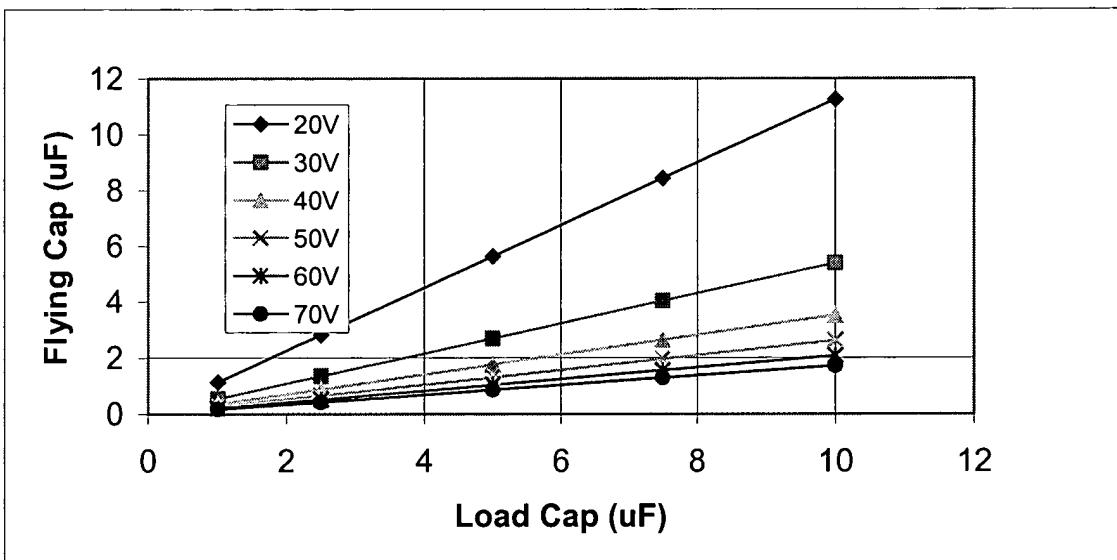
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Figure 7



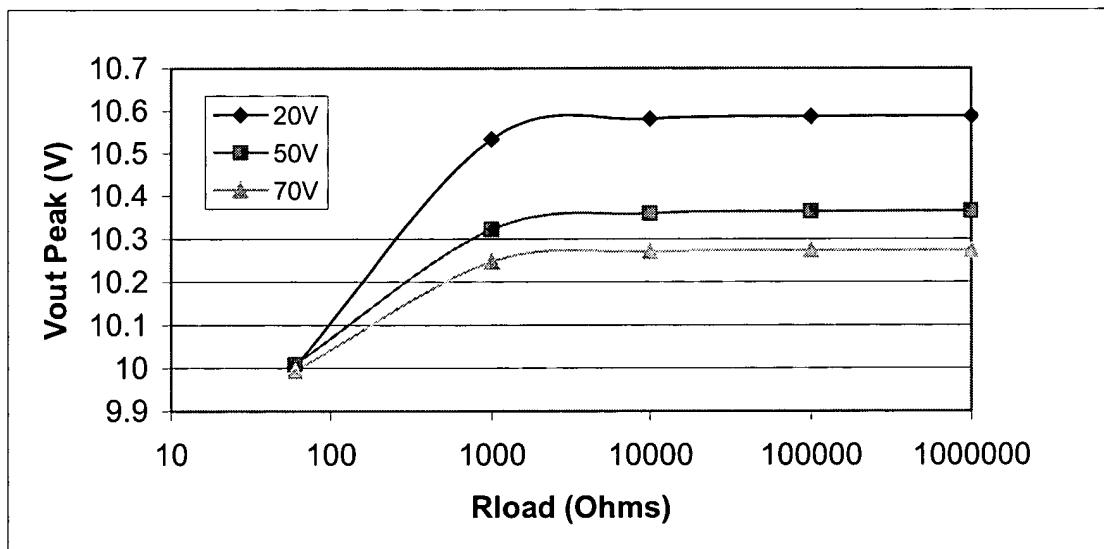
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Figure 8a



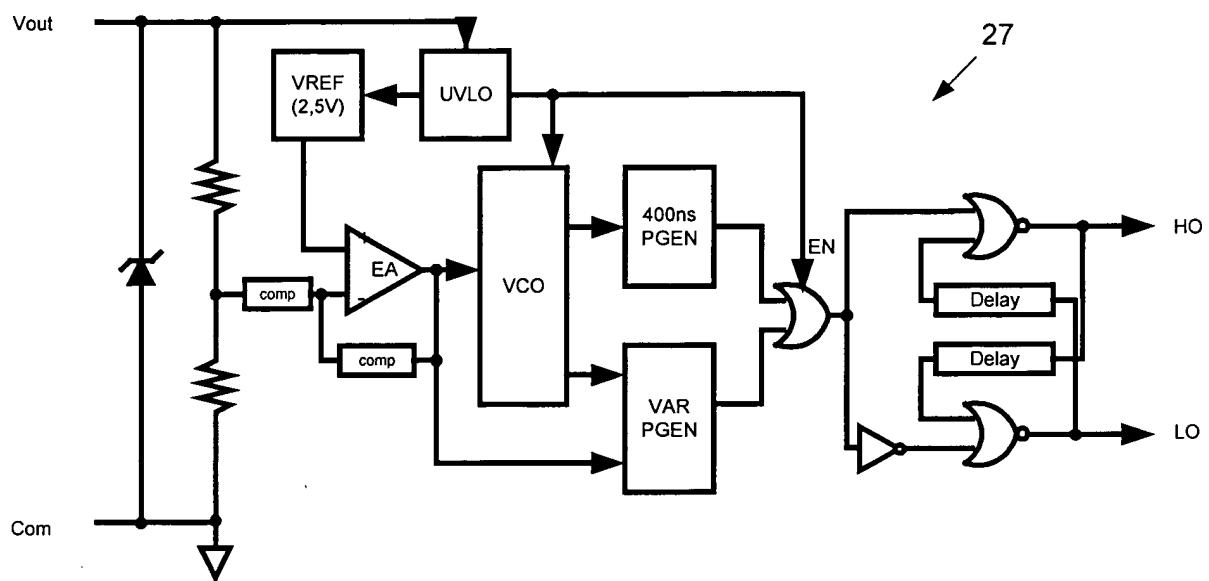
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Figure 8b



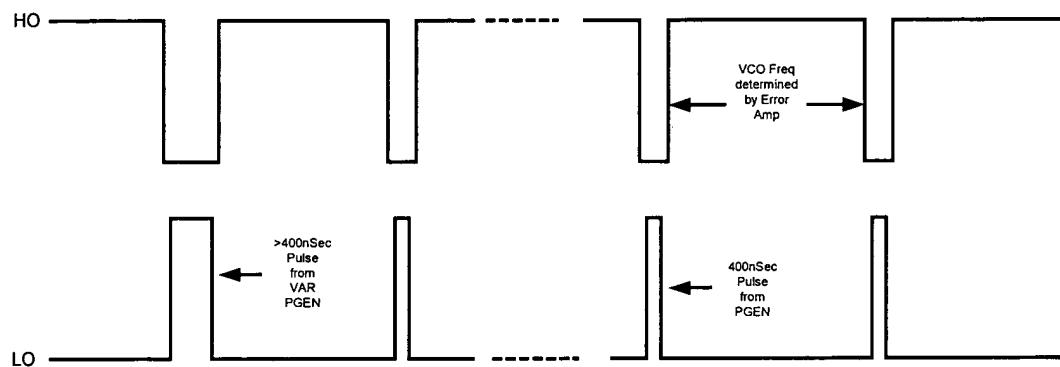
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Figure 9



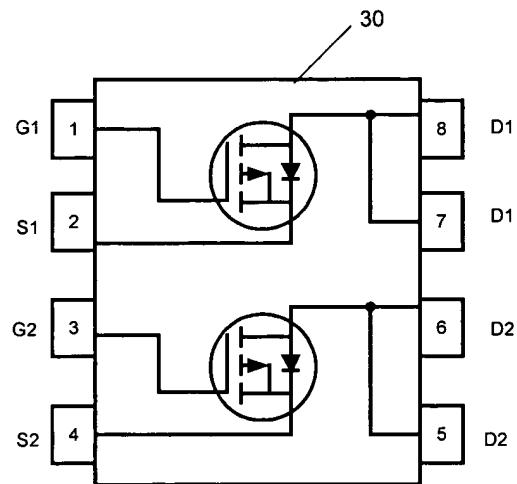
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Figure 10



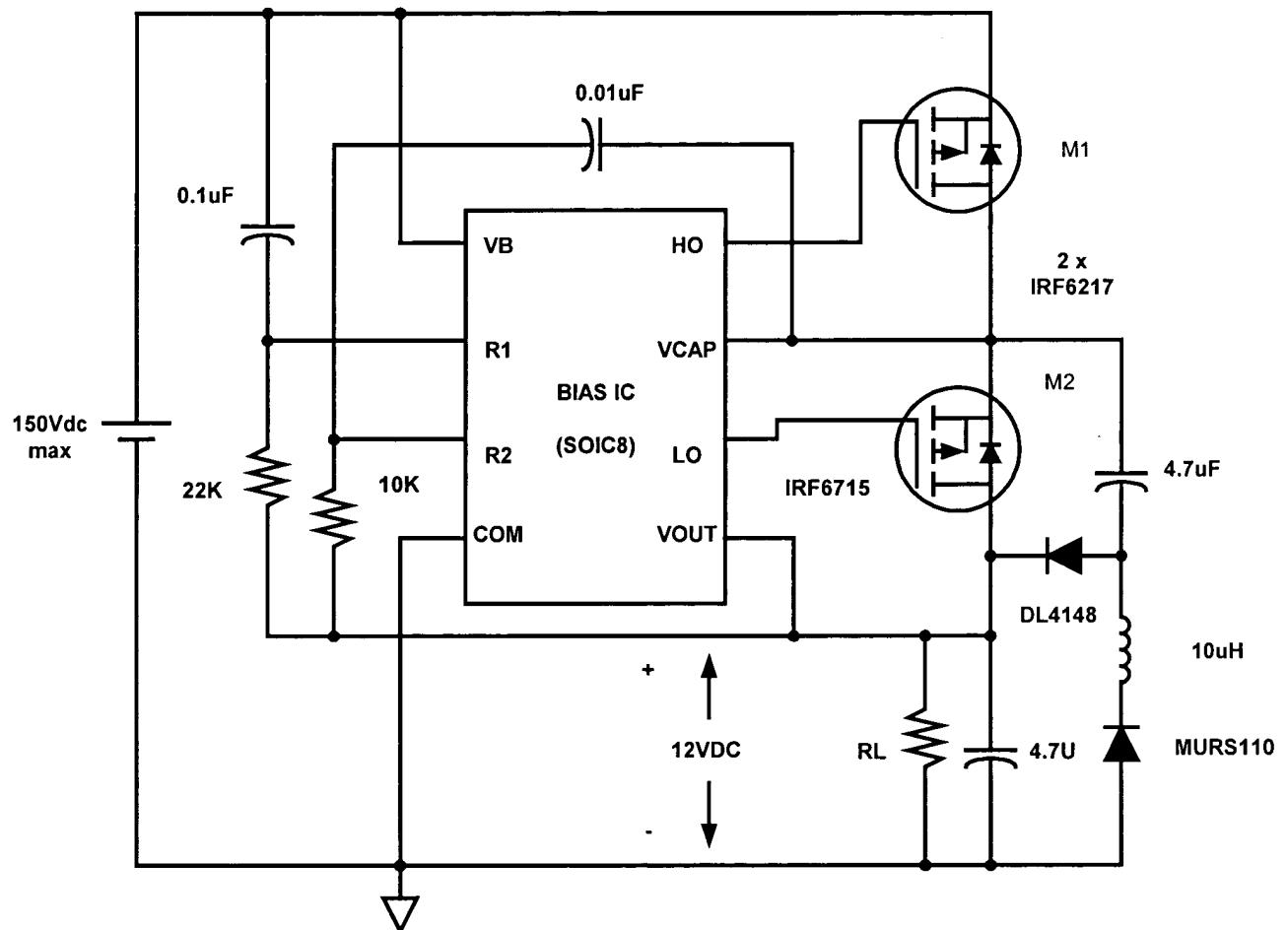
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Figure 11a



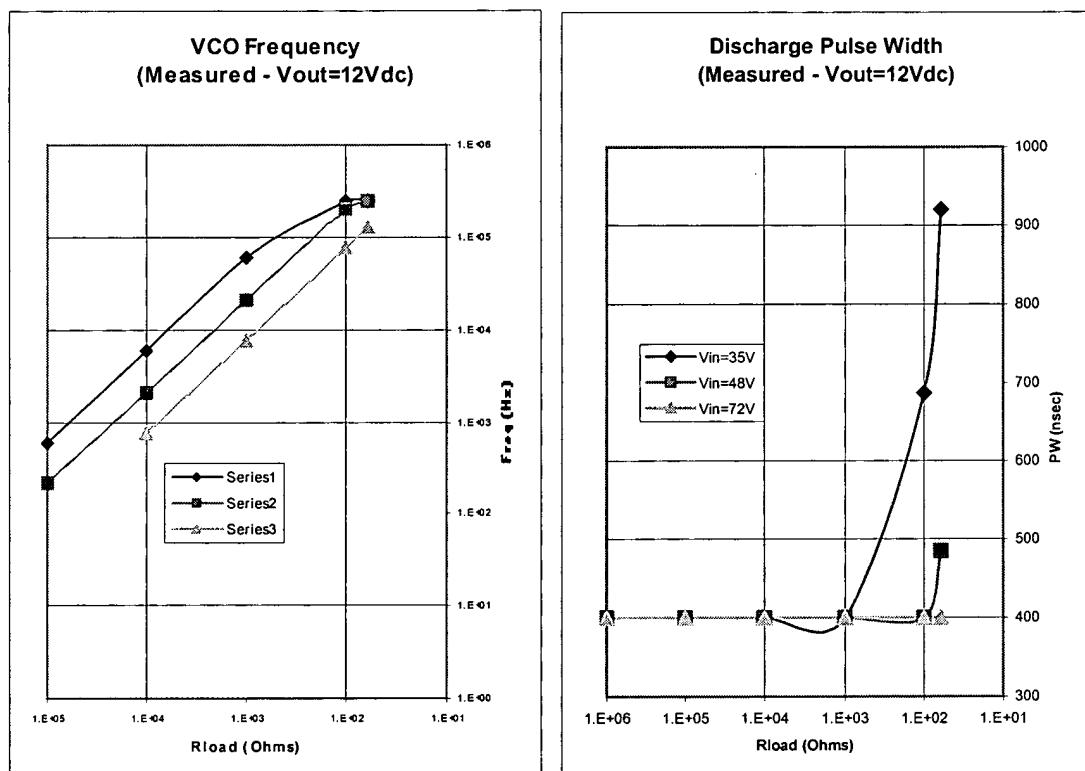
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Figure 11b



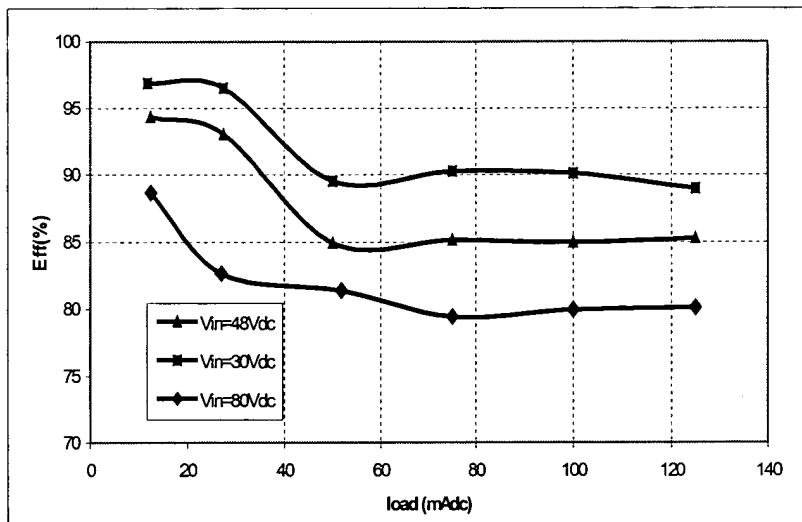
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Figure 12 – Verification of operating range



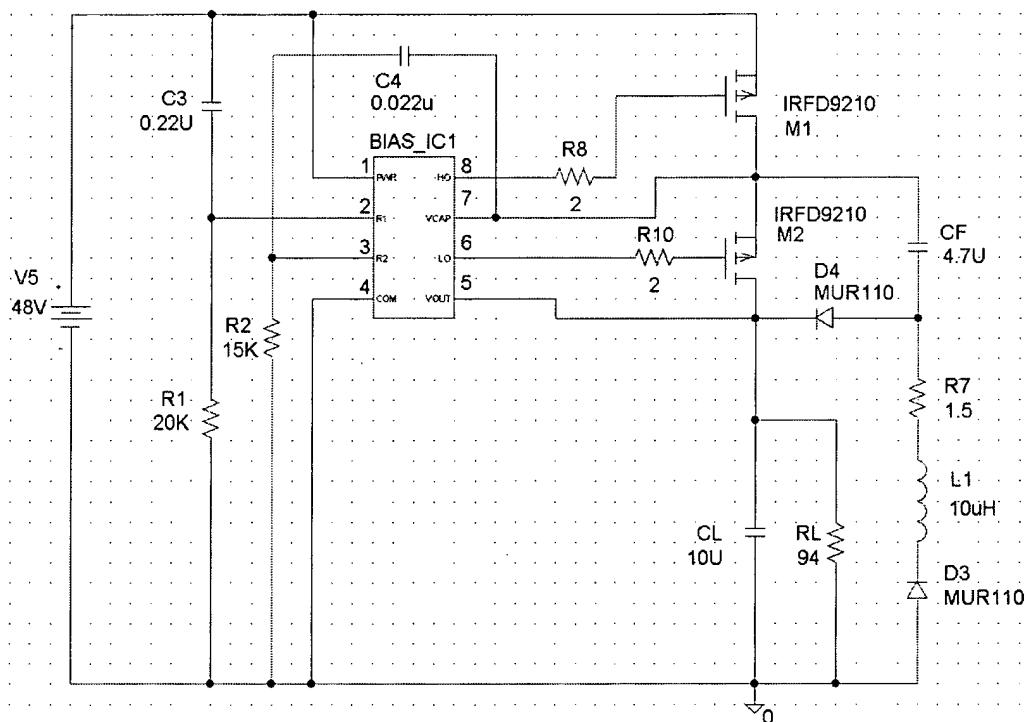
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Figure 13



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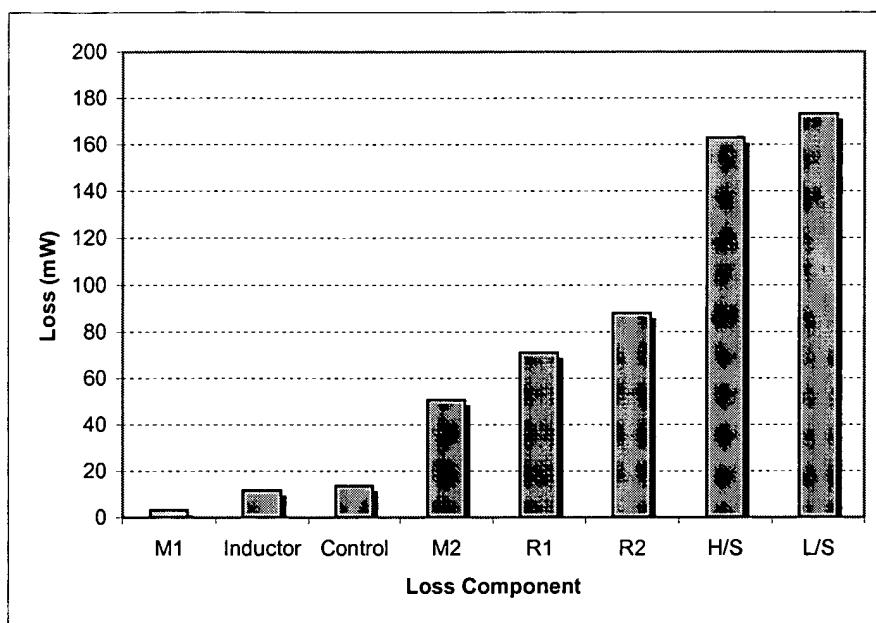
Figure 14a



$V_{in}=48V$
 $I_{in}=42.2mA$
 $V_{out}=11.7V$
 $Load=94\text{ Ohms}$
 $P_{in}=2.027W$
 $P_{out}=1.461$
 $Eff=72.1\%$

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Figure 14b



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12-Nov-02
18:23:18

2 μ s
2.00 V

2 μ s
1.00 V

2 μ s
50mV

2 μ s BWL

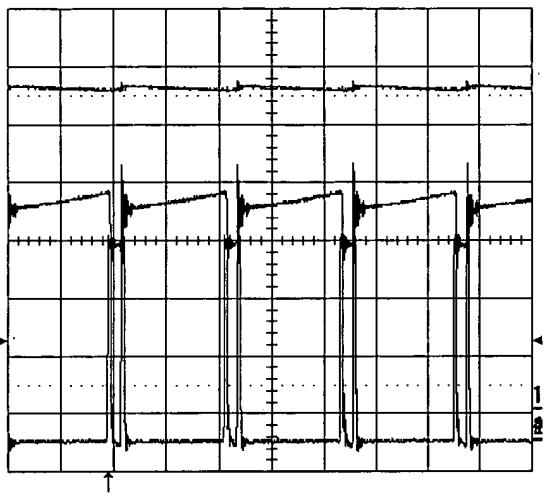


Figure 15a:
BIAS IC Waveforms

CH2: M1 drive
CH4: M2 drive
CH1: Output voltage

12-Nov-02
18:23:30

.1 μ s
2.00 V

.1 μ s
1.00 V

.1 μ s
50mV

.1 μ s BWL

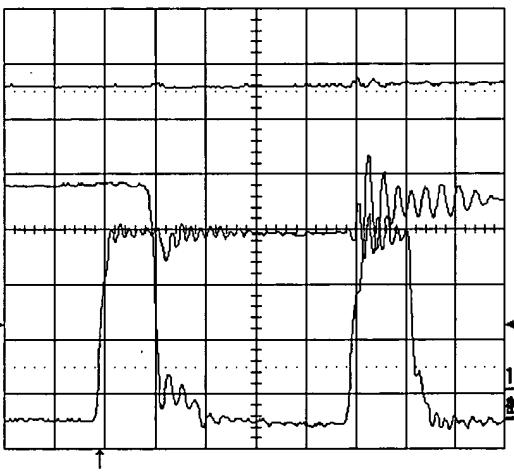


Figure 15b:
BIAS IC Waveforms
(Expanded)

CH2: M1 Drive
CH4: M2 Drive
CH1: Output voltage

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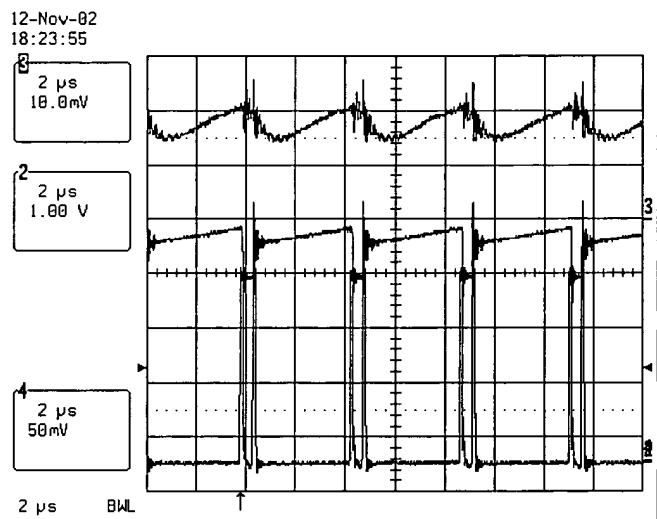
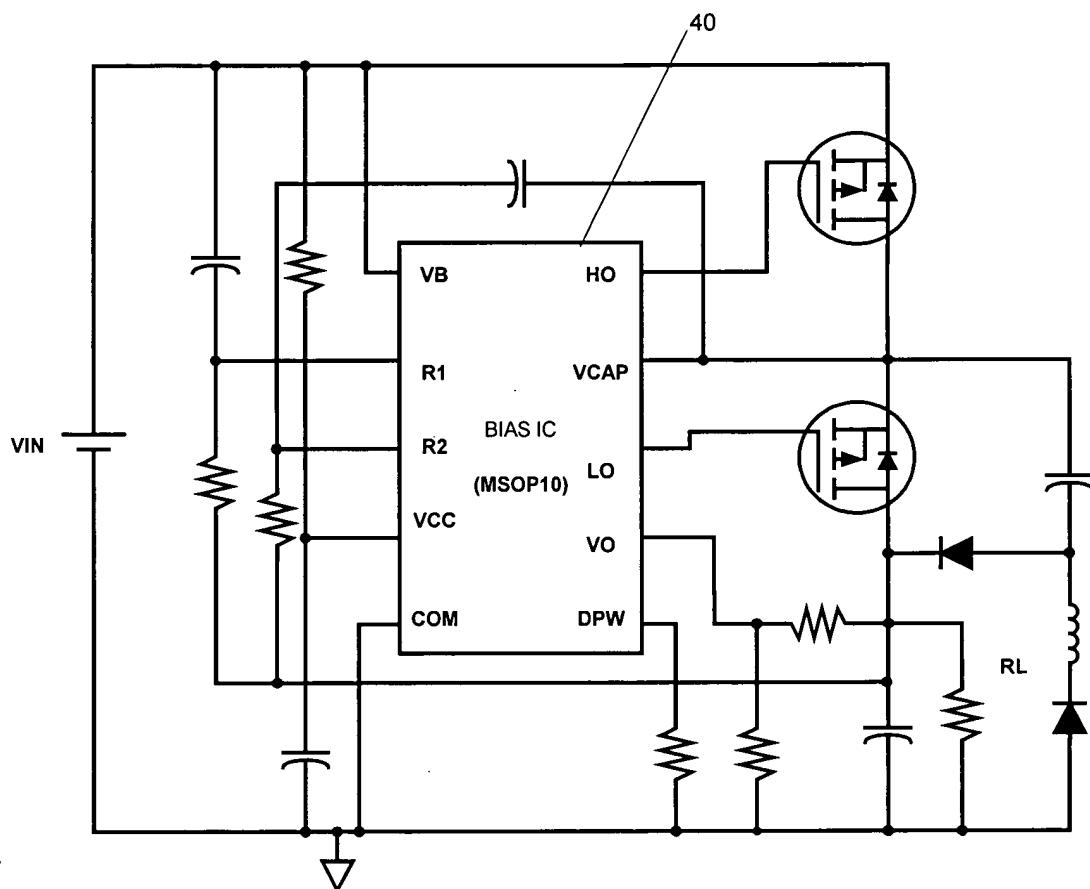


Figure 15c:
BIAS IC Waveforms

CH2: M1 Drive
CH4: M2 Drive
CH3: Input current
(10mA/div)

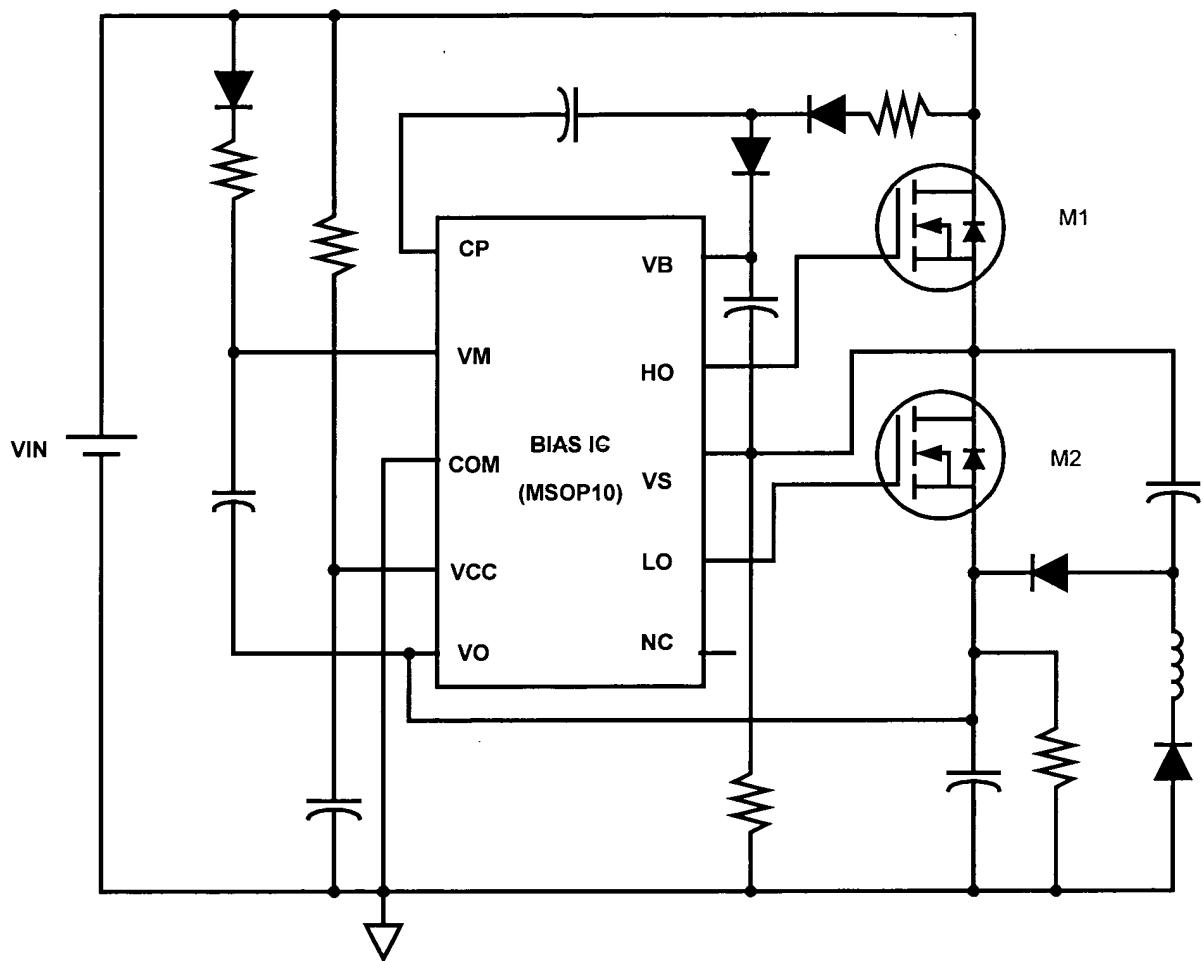
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Figure 16



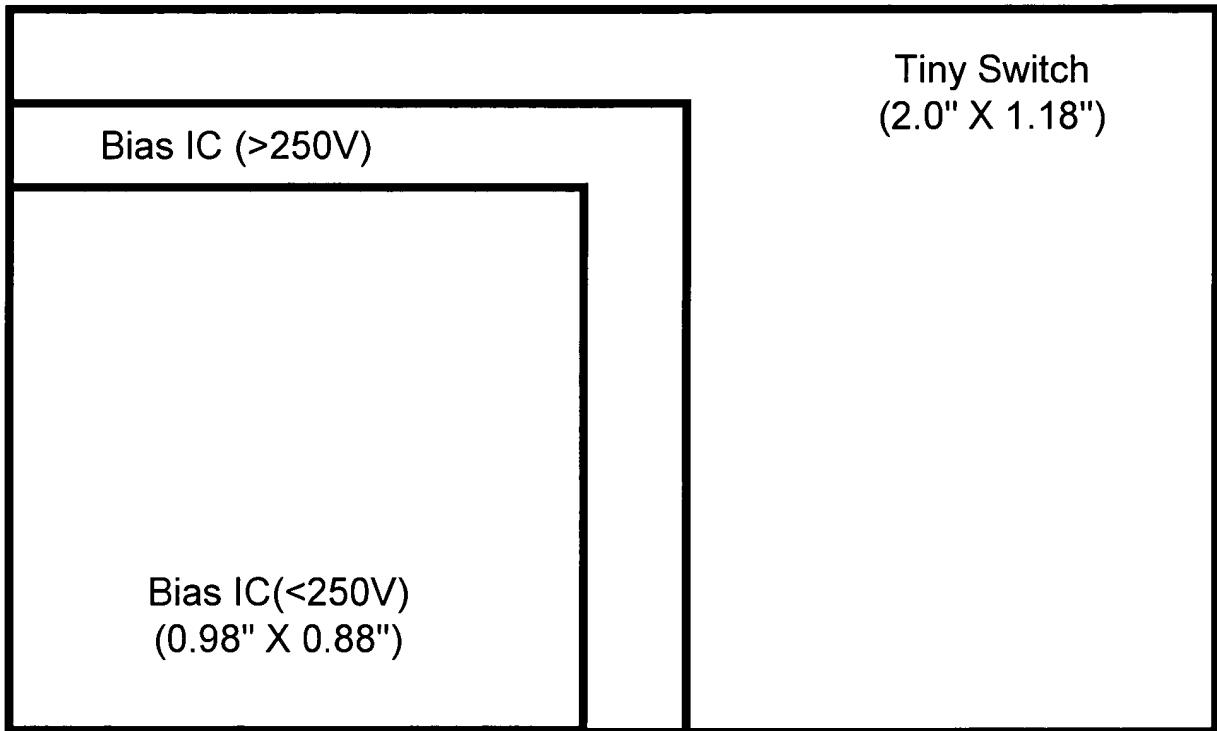
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Figure 17



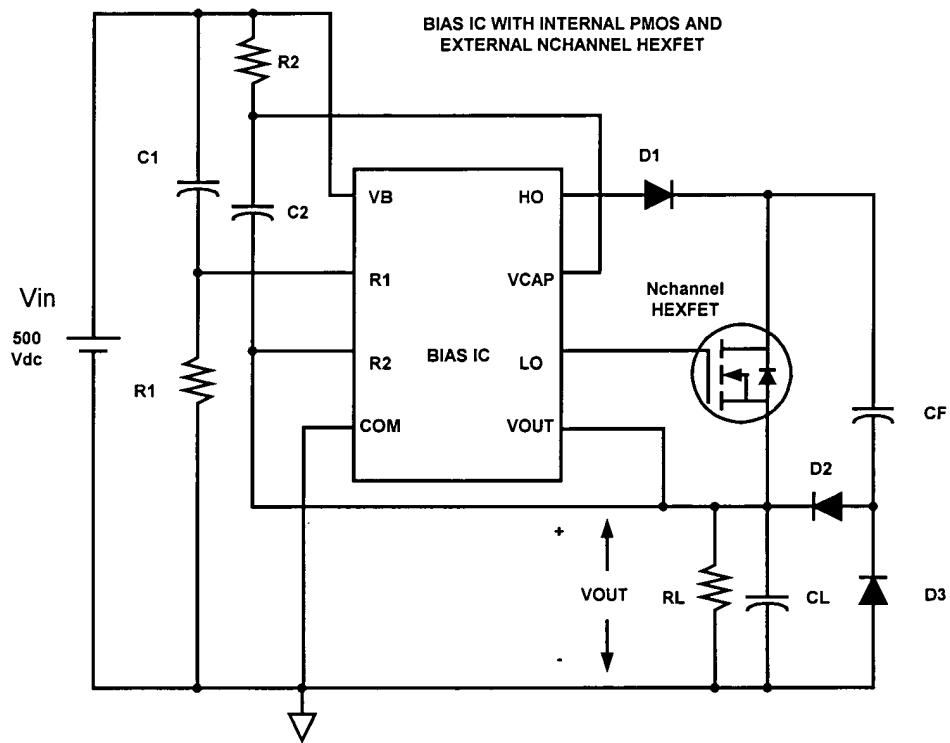
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Figure 18



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Figure 19



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Figure 20

